

REMARKS

The application has been amended and is believed to be in condition for allowance.

Previously, claims 1-12 were pending with claim 1 being independent. This amendment amends claim 1 to include the recitations of original claims 4 and 7, canceling those claims. This amendment also adds new independent claim 13 together with dependent claims 14-19.

The specification has been amended to add section headings. The abstract has also been amended.

Claims 1-3 stand rejected as anticipated by BABULA et al. 6,509,914. Claims 4-12 stand rejected as obvious over BABULA et al.

Claim 1 has been amended to include the recitations of claims 4 and 7. Accordingly, the obviousness rejection applies.

The invention in general is recited by claim 1 as addressing the occurrence of a problem affecting a medical apparatus by providing a means for dealing with such problems by firstly, determining the (those) component(s) that is (are) the cause of the problem, and secondly, displaying the problem component(s) on a display device.

Claim 1 has been amended to further recite that at least one of the components is a self-change component which can

be exchanged by an apparatus user without service support and, in the event that a self-change component is a component causing the problem concerned, the means of which for dealing with problems display a request to exchange this self-change component.

Claim 1 has also been amended to recite that, in which the means for dealing with problems itself orders the self-change component to be exchanged via telecommunication means.

Previously, if a medical apparatus operator was presented with faulty equipment, the operator would not know what component had a problem and needed to be changed. It follows that the operator would also not know if a self-change component was having a problem and needed changing. Instead, a serviceman was required and either a call to the service facility or a written request was necessary.

The present invention, however, enables the operator to address problems associated with self-change components that have a problem. The medical apparatus of the present invention determines which component(s) is (are) the cause of a problem and displays the problem-causing component on a display device so as to advise the operator and allow the operator to take action, if the component is a self-change component.

To even further simplify the operator's resolution of the problem, the present invention provides that the self-change component is automatically ordered via telecommunications means.

The Official Action indicates that BABULA et al. Figure 10 illustrates a system wherein description is provided on how to correct the problem with respect to the medical apparatus (Official Action page 4, first paragraph). BABULA et al. disclose a problem-solution resource system for medical diagnostic equipment. However, as outlined in the abstract, BABULA et al. disclose providing problem and solution information, such as that relating to a particular application or protocol, to medical diagnostic institutions and systems. That is, BABULA et al. disclose an "expert system" database which is a reference responsive to a user's questions.

See that the abstract discloses that information is created and stored on machine readable media; that a user may enter a problem query at a user interface at the diagnostic institution or system and search a database of information located at a centralized service facility; and that a list of solutions to the query is displayed at the diagnostic institution. Thereafter, the user selects and displays a desired solution from the user interface.

In contrast, the present invention is a medical apparatus with means for dealing with problems by determining the component causing the problem and displaying the problem-causing device on a display device. BABULA et al. do not determine the component(s) causing a problem and report the problem-causing

component via a display device. BABULA et al. only provide a database that may be used as a tool in determining the problem with the user inputting questions. BABULA et al. are only responsive to questions of the user and thus only operate as an interface to the saved knowledge of the expert system. The user must ask questions, use the tool's information, and the user determines the problem.

Although it is true that the present invention need not be completely automated, as the present invention includes an embodiment providing a guided test where the apparatus user is guided step by step through the test, in the present invention, the data obtained by this test serves for determining the components causing a problem. Importantly, the present invention provides a means for determining the problem-causing components, either through a guided test sequence or through self-test and does not rely on the user solving the problem and making the determination as to the problem-causing component.

Further, the newly-added recitations from claims 4 and 7 are believed to be non-obvious in combination with the original recitations of claim 1.

As noted above, claim 1 has been amended to further recite that at least one of the components is a self-change component. The Official Action offers Figure 10 of BABULA et al. However, the teaching of Figure 10 can only be understood in

conjunction with the remainder of the BABULA et al. patent. See Figure 9 showing the BABULA et al. system offering eight possible solutions to a problem, and that Figure 10 presents one of the eight possible solutions.

As discussed above, BABULA et al., through these figures, only is a tool for the user to determine the problem. One cannot fairly say that the recitation of determining the component that is the cause of a problem and displaying the component reads on a listing of plural possible causes of a problem.

Further, that BABULA et al. teach plural possible causes and offer solutions to those causes, cannot be said to be read on by the recitation "the means of which for dealing with problems display a request to exchange this self-change component." This recitation indicates the active display of a request, by the 'means for dealing', to exchange a particular self-change component. BABULA et al. Figure 10 does not request a specific component be exchanged but only explains how one component, of several, may be evaluated and corrected.

The claim recites more than a database of possible solutions when the recitation is of determining a problem-causing component and displaying a request to exchange the problem-causing, self-change component.

Claim 1 has also been amended to recite that the 'means for dealing' itself orders the self-change component via telecommunication means. The Official Action offers BABULA et al. column 9, lines 5-13. This passage does not disclose that recited. The passage only refers to telecommunications generally and that responses within the system to user requests may be automated (see lines 1 *et seq.*). There is, however, no disclosure of the 'means for dealing' ordering the self-change component needing replacement.

In view of these differences between the present invention, as recited by claim 1, and BABULA et al., claim 1 and the claims depending therefrom are believed to be non-obvious. Accordingly, reconsideration and allowance of claim 1 are respectfully requested.

New claim 13 recites the present invention as a medical apparatus comprising plural components operatively connected to perform a medical function; and a self-test means for independently determining, through an intelligent self-test when a problem affecting the medical apparatus occurs, a problem-causing component from among the plural components, and displaying the problem-causing component on a display device. BABULA et al. is not believed to anticipate this recitation of the present invention.

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Nor is BABULA et al. seen as anticipating or rendering obvious the new dependent claims for at least the reasons discussed above.

In view of the above, applicant believes that the present application is in condition for allowance and an early indication of the same is respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON



Roland E. Long, Jr., Reg. No. 41,949  
745 South 23<sup>rd</sup> Street  
Arlington, VA 22202  
Telephone (703) 521-2297  
Telefax (703) 685-0573  
(703) 979-4709

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